

PRESS RELEASE

Date: July, 2024 | For Immediate Release

Leading authorities on Vitamin B12 deficiency published a comprehensive supplement addressing B12-deficiency across all stages of life

[view the supplement here](#)

Rotterdam, Netherlands / Davis, California, USA,

'Vitamin B12 Deficiency in Clinical Practice: Scientific Insights at the Bookends of Life-Proceedings of the First International B12 Conference, June 2023, Rotterdam' is an 88-page supplement published by the *Food and Nutrition Bulletin* 2024/June. It contains 14 peer-reviewed manuscripts guest edited by hematologist/clinical pathologist Prof. Ralph Green (University of California, Davis) and co-organizer of the B12 Conference, Clara Plattel (B12 Institute, Rotterdam). This publication summarizes the latest research, case studies, critical insights, and practical tools by B12 experts from leading universities around the world, delving into the diagnosis, treatment, and implications of Vitamin B12 deficiency from pregnancy to old age.

In his keynote manuscript, Prof. Green provides a comprehensive insight into the causes and risk factors of Vitamin B12 deficiency across the human life cycle. He sets the stage for a detailed exploration of the multifaceted aspects of B12 deficiency (the "master of disguises"), highlighting the conference's key discussion points and emphasizing the importance of a multidisciplinary approach to addressing this issue.

TOPICS

B12 Deficiency in Pregnancy, Infants, and Adolescents

- **Early Development Impacts:** Santos-Calderón et al. discuss the critical effects of B12 deficiency during early development, stressing its long-term impacts on offspring. The paper calls for further research considering the rising popularity of plant-based diets.
- **Neurodevelopment in Infancy:** Bjørke-Monsen highlights the essential role of optimal B12 levels in neurodevelopment during infancy, indicating significant consequences of deficiency during this crucial stage of the life cycle.
- **Diagnosis and Treatment in Children:** Plattel et al. emphasize the need for revised diagnostic parameters and treatment options tailored for children and adolescents to address B12 deficiency more effectively in the pediatric age group.

Diagnosis and Treatment of B12 Deficiency in Adults

- **Biomarkers for Diagnosis:** Nexø et al. focus on using Vitamin B12 biomarkers to improve the diagnosis and management of B12 deficiency in adults.
- **Pernicious Anemia Symptoms:** Seage et al. provide a systematic review of the symptoms associated with pernicious anemia, a condition causing profound B12 deficiency through malabsorption.
- **Advances in Management:** Wolffenbuttel et al. detail recent advances in diagnostic methodologies and treatment options, aiming to enhance the management of B12 deficiency in the adult population.

B12 Deficiency and Cognitive Decline in the Elderly

- **Cognitive Impairment Link:** Rosenberg examines the connection between B12 deficiency and cognitive impairment in older adults, emphasizing the importance of prevention and targeted treatment strategies.
- **Case Study:** Dekker et al. present a case study that illustrates the practical implications of B12 deficiency on cognitive function in the elderly, reinforcing the need for attentive management.



Tufts
UNIVERSITY

TU Delft

 **B12 institute**

Risk Factors and Current Guidelines in B12 Deficiency

- High Folic Acid Impact: Miller et al. explore the impact of high folic acid supplement intake in the presence of B12 deficiency, discussing mechanisms and potential complications in such scenarios.
- Vegetarian and Vegan Diets: Hannibal et al. investigate the relationship between B12 deficiency and vegetarian or vegan diets, highlighting the nutritional risks associated with exclusively plant-based eating habits.
- Patient Monitoring: Suijker et al. emphasize the importance of patient monitoring outcomes in both research and diagnosis of B12 deficiency.
- Guideline Revisions: Plattel calls for substantial revisions to current B12 deficiency guidelines, citing a lack of robust clinical evidence supporting existing recommendations.

Editors' Note about the significance of the supplement

This supplement aims to foster a multidisciplinary approach to better understand and address Vitamin B12 deficiency, a significant global health problem affecting all ages. Broad and varied contributions by experts highlight the complexity of diagnosing and treating B12 deficiency and underscore the need for heightened awareness and improved clinical practices. With a paucity of relevant clinical trials, critical input on guidelines (diagnosis and management) from clinical and research experts and patients is essential.

Availability

The supplement is available through the **Food and Nutrition Bulletin**, [through this link](#) and thanks to generous donor financial support, healthcare professionals, academic institutions, patients, and those involved in public health policy can access it FREE of charge.

Contact Information

For more details, interviews, or further inquiries, please contact press@b12conference.nl

About the Food and Nutrition Bulletin

The Food and Nutrition Bulletin is a leading peer-reviewed journal focused on addressing global nutrition and food policy issues. Through publications like this supplement, it aims to foster informed health decisions and effective public health strategies.

This press release is intended for healthcare professionals, academic institutions, and journalists to spread awareness and encourage further research and discussion on this critical health topic. It invites the global health community to explore this significant publication, which aims to enhance understanding and improve health outcomes related to Vitamin B12 deficiency across the lifespan.

